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NEWS	3	MAR 16	CASREACT coverage extended
NEWS	4	MAR 20	MARPAT now updated daily
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NEWS	7	APR 02	JICST-EPLUS removed from database clusters and STN
NEWS	8	APR 30	GENBANK reloaded and enhanced with Genome Project ID field
NEWS	9	APR 30	CHEMCATS enhanced with 1.2 million new records
NEWS	10	APR 30	CA/CAPLUS enhanced with 1870-1889 U.S. patent records
NEWS	11	APR 30	INPADOC replaced by INPADOCDB on STN
NEWS	12	MAY 01	New CAS web site launched
NEWS	13	MAY 08	CA/CAPLUS Indian patent publication number format defined
NEWS	14	MAY 14	RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS	15	MAY 21	BIOSIS reloaded and enhanced with archival data
NEWS	16	MAY 21	TOXCENTER enhanced with BIOSIS reload
NEWS	17	MAY 21	CA/CAPLUS enhanced with additional kind codes for German patents
NEWS	18	MAY 22	CA/CAPLUS enhanced with IPC reclassification in Japanese patents
NEWS	19	JUN 27	CA/CAPLUS enhanced with pre-1967 CAS Registry Numbers
NEWS	20	JUN 29	STN Viewer now available
NEWS	21	JUN 29	STN Express, Version 8.2, now available
NEWS	22	JUL 02	LEMBASE coverage updated
NEWS	23	JUL 02	LMEDLINE coverage updated
NEWS	24	JUL 02	SCISEARCH enhanced with complete author names
NEWS	25	JUL 02	CHEMCATS accession numbers revised
NEWS	26	JUL 02	CA/CAPLUS enhanced with utility model patents from China
NEWS	27	JUL 16	CAPLUS enhanced with French and German abstracts
NEWS	28	JUL 18	CA/CAPLUS patent coverage enhanced
NEWS	29	JUL 26	USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS	30	JUL 30	USGENE now available on STN

NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,  
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.

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FILE LAST UPDATED: 1 Aug 2007 (20070801/ED)

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=> glucan and "lactic acid"

15149 GLUCAN

4353 GLUCANS

16311 GLUCAN

(GLUCAN OR GLUCANS)

105468 "LACTIC"

28 "LACTICS"

105477 "LACTIC"

("LACTIC" OR "LACTICS")

4410974 "ACID"

1584566 "ACIDS"

4911875 "ACID"

("ACID" OR "ACIDS")

90637 "LACTIC ACID"

("LACTIC" (W) "ACID")

L1 243 GLUCAN AND "LACTIC ACID"

=> glucan and enterococcus

15149 GLUCAN

4353 GLUCANS

16311 GLUCAN

(GLUCAN OR GLUCANS)

10964 ENTEROCOCCUS

1 ENTEROCOCCUSES

10965 ENTEROCOCCUS

(ENTEROCOCCUS OR ENTEROCOCCUSES)

L2 32 GLUCAN AND ENTEROCOCCUS

=> d 12 1-32 ibib abs

L2 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:475342 CAPLUS

DOCUMENT NUMBER: 146:500125

TITLE: Enzyme supplements in broiler chicken diets: in vitro and in vivo effects on bacterial growth

AUTHOR(S): Rosin, Erin A.; Blank, Greg; Slominski, Bogdan A.; Holley, Rick A.

CORPORATE SOURCE: Department of Food Science, University of Manitoba, Winnipeg, MB, R3T 2N2, Can.

SOURCE: Journal of the Science of Food and Agriculture (2007), 87(6), 1009-1020

CODEN: JSFAAE; ISSN: 0022-5142

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Increasing the growth performance of broiler chickens by supplementing their diets with exogenous enzymes can also contribute to pos. changes in gut health. In this respect the growth of various bacteria normally associated with the gastrointestinal tract of poultry was assessed in vitro using a medium containing arabinoxylan,  $\beta$ -glucan, guar gum and raffinose and their corresponding enzymes. Overall, enzymes releasing the largest amts. of free sugars yielded the largest increase in bacterial nos. Accordingly,  $\beta$ -glucan and raffinose treated with their resp. enzymes promoted the largest number of bacterial types, reaching a min. of 1.0 log<sub>10</sub> population within 6 h at 40 °C. A broiler chicken growth trial was also conducted using wheat-, barley- and corn-based diets with and without enzyme and probiotic addition *Escherichia coli*, coliforms, enterococci and aerobic and anaerobic sporeformers were monitored for growth in both the caecum and ileum. Enzyme supplementation reduced *E. coli* levels in the caecum of broilers fed wheat- or corn-based diets. A further reduction in *E. coli* nos. was observed in broilers fed the

same

diets supplemented with a combination of enzyme and probiotic. Enzyme supplementation had much less of an effect on microbial populations in the ileum. Inclusion of probiotics reduced *E. coli* levels in the caecum and ileum but only in broilers fed wheat- and corn-based diets. Anaerobic spore levels in the ileum increased in all diets containing probiotic. Overall, inclusion of enzymes or probiotics exhibited mixed effects on gut bacteria, depending on the nature of the carbohydrate source and enzyme.

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1113318 CAPLUS

DOCUMENT NUMBER: 145:453620

TITLE: Beta 1,3-glucan recognition protein from the mosquito, *Armigeres subalbatus*, is involved in the recognition of distinct types of bacteria in innate immune responses

AUTHOR(S): Wang, Xinguo; Rocheleau, Thomas A.; Fuchs, Jeremy F.; Christensen, Bruce M.

CORPORATE SOURCE: Department of Animal Health and Biomedical Sciences, University of Wisconsin-Madison, Madison, WI, 53706, USA

SOURCE: Cellular Microbiology (2006), 8(10), 1581-1590

CODEN: CEMIF5; ISSN: 1462-5814

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The activation of an immune response to invading microorganisms generally requires recognition by pattern recognition receptors.  $\beta$ 1,3-Glucan recognition proteins (GRPs) have specific affinity for  $\beta$ 1,3-glucan, a component on the surface of fungi and bacteria. In this study, the authors show that GRP from *Armigeres subalbatus* mosquitoes (AsGRP) is able to bind different bacterial species,

and that this binding varies from species to species and is independent of Gram type. AsGRP knockdown with double-stranded RNA increases the mortality of mosquitoes to those bacteria that strongly bind AsGRP, but not to bacteria that do not detectably bind AsGRP. This increase in susceptibility is partially evidenced by decreased melanization in *Salmonella typhimurium*. Furthermore, AsGRP expression is differentially affected by the presence of different species of bacteria. These results demonstrate that AsGRP is selective in its affinity to different bacteria and; therefore, plays a role in the antibacterial immune response of mosquitoes.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:703768 CAPLUS

DOCUMENT NUMBER: 146:269854

TITLE: Isolation and identification of mixed linked  $\beta$ -glucan degrading bacteria in the intestine of broiler chickens and partial characterization of respective 1,3-1,4- $\beta$ -glucanase activities

AUTHOR(S): Beckmann, Lutz; Simon, Ortwin; Vahjen, Wilfried  
CORPORATE SOURCE: Institute for Animal Nutrition, Faculty of Veterinary Medicine, Free University of Berlin, Berlin, D-14195, Germany

SOURCE: Journal of Basic Microbiology (2006), 46(3), 175-185  
CODEN: JBMIEQ; ISSN: 0233-111X

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Media with 1,3-1,4- $\beta$ -glucans as selective markers were used for isolation of non-starch-polysaccharide (NSP) degrading bacteria from the intestinal tract of broiler chicken. Formerly unknown 1,3-1,4- $\beta$ -endoglucanase activities in various bacterial species were identified in this study. *Enterococcus faecium*, *Streptococcus*, *Bacteroides*, and *Clostridium* strains seem to be responsible for degradation of mixed linked  $\beta$ -glucans in the small intestine and in the hind gut of chickens. Strict anaerobic bacteria (*Bacteroides ovatus*, *B. uniformis*, presumably *B. capillosus* and *Clostridium perfringens*) as well as an unidentified bacterium with 98% 16S rDNA homol. to an uncultured chicken cecum bacterium were isolated. Addnl., *Streptococcus bovis* with 1,3-1,4- $\beta$ -endoglucanase activity was also detected. Different 1,3-1,4- $\beta$ -endoglucanase activity profiles were observed in SDS/PAGE zymograms.

REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:357043 CAPLUS

DOCUMENT NUMBER: 144:368972

TITLE: Antidiarrheal *Saccharomyces* as dietary supplement and feed additive

INVENTOR(S): Tanaka, Shinichiro; Tsumura, Sanae; Yoshida, Naoto  
PATENT ASSIGNEE(S): Zentatsusha Y. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006101784	A	20060420	JP 2004-294137	20041006
PRIORITY APPLN. INFO:			JP 2004-294137	20041006
AB The antidiarrheal probiotic <i>Saccharomyces</i> is useful for making				

antidiarrheal feed additive for control of loose passage and diarrhea, and nutrition supplement. Addnl.,  $\beta$ -glucan and/or lactic acid bacteria such as Enterococcus may also be used along with the Saccharomyces for making the antidiarrheal feed additive and nutrition supplement. The physiol. and morphol. characteristics of the antidiarrheal Saccharomyces were also given.

L2 ANSWER 5 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2006:272729 CAPLUS  
 DOCUMENT NUMBER: 144:310457  
 TITLE: Protective anti-glucan antibodies with preference for  $\beta$ -1,3- glucans  
 INVENTOR(S): Cassone, Antonio  
 PATENT ASSIGNEE(S): Italy  
 SOURCE: PCT Int. Appl., 37 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006030318	A2	20060323	WO 2005-IB3153	20050914
WO 2006030318	A3	20060526		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
CA 2580362	A1	20060323	CA 2005-2580362	20050914
EP 1789448	A2	20070530	EP 2005-791821	20050914
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRIORITY APPLN. INFO.:			GB 2004-20466	A 20040914
			WO 2005-IB3153	W 20050914

AB The author discloses monoclonal antibodies that bind to  $\beta$ -1,3-glucan, hybridoma cell lines producing the antibodies, and use of such antibodies for treatment of microbial infections. In one example, an anti- $\beta$ -1,3- glucan antibody was shown to be protective against systemic fungal infection with Candida albicans.

L2 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2005:1151664 CAPLUS  
 DOCUMENT NUMBER: 145:162957  
 TITLE: Antimicrobial activity of pycnogenol  
 AUTHOR(S): Torras, Maria Angeles Calvo; Faura, Carles Adelantado; Schonlau, F.; Rohdewald, P.  
 CORPORATE SOURCE: Veterinary Faculty, University Autonomous of Barcelona, Spain  
 SOURCE: Phytotherapy Research (2005), 19(7), 647-648  
 CODEN: PHYREH; ISSN: 0951-418X  
 PUBLISHER: John Wiley & Sons Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Pycnogenol, a standardized extract of Pinus pinaster bark, was tested for its antimicrobial activity against 23 different pathogenic prokaryotic (gram-pos. and gram-neg.) and eukaryotic (yeast and fungi) microorganisms.

Pycnogenol inhibited the growth of all the tested microorganisms in min. concns. ranging from 20 to 250 µg/mL. Thus, Pycnogenol in concns. as low as 0.025% could counteract the growth of all the strains investigated in our study. These results conform with clin. oral health care studies describing the prevention of plaque formation and the clearance of candidiasis by Pycnogenol.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 7 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1014744 CAPLUS

DOCUMENT NUMBER: 144:259176

TITLE: Assessment of exposure of sewage plant workers to harmful agents in the workplace

AUTHOR(S): Cyprowski, Marcin; Szarapinska-Kwaszewska, Jadwiga; Dudkiewicz, Bozena; Krajewski, Jan A.; Szadkowska-Stanczyk, Irena

CORPORATE SOURCE: Zakl. Srodowiskowych Zagrozen Zdrowia, Inst. Med. Pracy im. J. Nofera, Lodz, 90-950, Pol.

SOURCE: Medycyna Pracy (2005), 56(3), 213-222

CODEN: MEPAAX; ISSN: 0465-5893

PUBLISHER: Instytut Medycyny Pracy

DOCUMENT TYPE: Journal

LANGUAGE: Polish

AB Background: The purpose of the study was to evaluate exposure to biol. and chemical agents in a sewage treatment plant. Materials and Methods: Sampling was carried out in the summer and wintertime at the morning workshift. Ninety-nine sewage workers taking part in the study were divided into four occupational subgroups: mech. treatment, biol. treatment, sewage sludge treatment, and operation control workers. Exposure to: H<sub>2</sub>S, SO<sub>2</sub>, Pb, Cd, Cr<sup>3+</sup>, Cr<sup>6+</sup>, endotoxins, (1→3)-β-D glucans, and microorganisms was evaluated with special identification of Gram-neg. rods. Results: The concns. of dust containing heavy metals and concns. of gases from all stations did not exceed MAC values. Concns. of endotoxins ranged from 0.08 to 223 ng/m<sup>3</sup>, and glucans from 0.00 to 163 ng/m<sup>3</sup>. The highest concns. were found among sewage sludge treatment workers, in the summertime (geometric mean value = 37 ng/m<sup>3</sup>). In the winter, concns. were almost ten times lower. Over sixty percent of all results exceeded the proposed reference value for airborne endotoxins (10 ng/m<sup>3</sup>). Concns. of airborne bacteria in the sewage plant were at low level (102 cfu/m<sup>3</sup>), except the sludge lagoon and sludge concentration building, where the results exceeded the proposed reference value for mesophilic bacteria (105 cfu/m<sup>3</sup>). "Environmental" bacteria (Pseudomonas, Burkholderia, Shewanella) predominated in the samples. There were also found enterobacteria genus (Enterococcus, family Enterobacteriaceae) - good indicators of hygienic cleanliness of the air. Conclusions: The study proved that the exposure varied and depended on the stage of sewage treatment. The sewage sludge treatment process was characterized by the highest emission of bioaerosols. All microorganisms found in the sewage plant belong to the second occupational risk group, under the ordinance of the Ministry of Health.

L2 ANSWER 8 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:564598 CAPLUS

DOCUMENT NUMBER: 143:77319

TITLE: Continuous multi-microencapsulation process for improving the stability and storage life of biologically active ingredients in foods, cosmetics and drugs

INVENTOR(S): Casana Giner, Victor; Gimeno Sierra, Miguel; Gimeno Sierra, Barbara; Moser, Martha

PATENT ASSIGNEE(S): GAT Formulation G.m.b.H., Austria

SOURCE: PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Spanish  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005058476	A1	20050630	WO 2004-ES562	20041217
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
ES 2235642	A1	20050701	ES 2003-2998	20031218
ES 2235642	B2	20060301		
AU 2004298792	A1	20050630	AU 2004-298792	20041217
CA 2550615	A1	20050630	CA 2004-2550615	20041217
EP 1702675	A1	20060920	EP 2004-805105	20041217
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS			
CN 1917946	A	20070221	CN 2004-80041872	20041217
BR 2004017767	A	20070417	BR 2004-17767	20041217
US 2007077308	A1	20070405	US 2006-596556	20060616
PRIORITY APPLN. INFO.:			ES 2003-2998	A 20031218
			WO 2004-ES562	W 20041217

AB Microcapsules are obtained in a continuous water-in-oil-in-water microencapsulation process through in situ and interfacial polymerization of the

emulsion. A formulation comprises a continuous water phase having a dispersion of microcapsules which contain oil drops and in the inside of each oil phase drop (containing optionally oil-soluble materials) there is a dispersion of water, or aqueous extract or water-dispersible material or water-soluble material. The oil drops are encapsulated with a polymerizable material of natural origin. Such microcapsules are appropriate for spray-drying, to be used as dry powder, lyophilized, self-emulsifiable powder, gel, cream, and any liquid form. The active compds. included in the microcapsules are beneficial to health and other biol. purposes. Such formulations are appropriate for incorporation in any class of food, especially for the production of nutraceuticals, as well as cosmetic products (such as rejuvenescence creams, anti-wrinkle creams, gels, bath and shower consumable products and sprays). The preps. are adequate to stabilize compds. added to food, media for cultivating microbes and nutraceuticals, especially those which are easily degradable or oxidizable.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 9 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:533226 CAPLUS

DOCUMENT NUMBER: 143:271848

TITLE: Manufacturing process for water improvement agent containing live bacterials and activated medium

INVENTOR(S): Huang, Zhongping

PATENT ASSIGNEE(S): Zhongshun Biotechnology Co., Ltd., Wuxi, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, No pp. given

CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1528681	A	20040915	CN 2003-158365	20030928
PRIORITY APPLN. INFO.:			CN 2003-158365	20030928

AB The title agent is used to improve the water quality and is manufactured through the following steps: (1) add culture medium containing C source and N source into a fermentation container, add water, (2) sterilize the mixture at high temperature, cool, (3) incubate live bacterial and ferment, (4) add carrier, dry the mixture in a drying machine to get solid microorganism semi-finished product, (5) mix the semi-finished product with the activated culture medium. This improvement agent converts C-containing organic substances into carbon dioxide and water. This improvement agent also converts N-containing organic substances into amine, nitrate and nitrite, and finally ammonia, which will escape from the water. The live bacterial activated before using will propagate quickly and the water quality are improved quickly. This simple process provides a high efficiency low cost water improvement agent.

L2 ANSWER 10 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:429190 CAPLUS

DOCUMENT NUMBER: 142:480754

TITLE: Antigen modified cancer cell vaccines for cancer therapy

INVENTOR(S): Lawman, Michael J. P.; Lawman, Patricia D.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 35 pp., Cont.-in-part of U.S. Ser. No. 652,578.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005106130	A1	20050519	US 2004-964471	20041013
WO 9936433	A2	19990722	WO 1999-US787	19990114
WO 9936433	A3	19990923		
W: CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 2002141981	A1	20021003	US 2001-950374	20010910
US 2004142464	A1	20040722	US 2003-652578	20030829
US 7094603	B2	20060822		

PRIORITY APPLN. INFO.:		US 1998-71497P	P 19980114
		WO 1999-US787	A1 19990114
		US 1999-394226	B1 19990913
		US 2001-950374	A1 20010910
		US 2003-652578	A2 20030829

AB The disclosed invention presents methods for treating cancers, particularly tumorigenic types. Cancer cells are modified to express highly immunogenic antigens so that the cells will generate a defensive response in a mammal that exhibits the cancer or is predisposed to cancer and prevent or ameliorate proliferation of cancer cells. The novel cancer cell vaccines are expected to be effective against a wide range of tumors and leukemias. The examples relate to transformation of murine neuroblastoma cell line, Neuro-2a, with gene for streptococcal Emm55 polypeptide or variants thereof. The modified neuroblastoma cells can further comprise a nucleic acid segment encoding an MHC protein and optionally a nucleic acid encoding a cytokine. In a mouse model, vaccination with the Neuro-2a/Emm55 delayed or totally prevented tumor development, and in addition, sera from inoculated mice produced antibodies specific for Neuro-2a antigens.



L2 ANSWER 11 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:754442 CAPLUS  
 DOCUMENT NUMBER: 141:242145  
 TITLE:  $\beta$ - Glucan-containing culture media for  
 relieving constipation, potentiating immune systems  
 and moisturizing the skin  
 INVENTOR(S): Moriya, Naoyuki; Moriya, Yukiko; Suzuki, Kenji  
 PATENT ASSIGNEE(S): Aureo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004078188	A1	20040916	WO 2004-JP2780	20040304
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2004269407	A	20040930	JP 2003-61379	20030307
JP 2004269408	A	20040930	JP 2003-61382	20030307
JP 2005220065	A	20050818	JP 2004-28965	20040205
CN 1700926	A	20051123	CN 2004-80001038	20040304
EP 1602377	A1	20051207	EP 2004-717235	20040304
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
US 2005272694	A1	20051208	US 2005-531463	20050415
PRIORITY APPLN. INFO.:				
			JP 2003-61379	A 20030307
			JP 2003-61382	A 20030307
			JP 2004-28965	A 20040205
			WO 2004-JP2780	W 20040304

AB It is intended to provide a composition containing  $\beta$ - glucan in which the physiol. active effects of  $\beta$ -1,3-1,6- glucan contained in the culture medium of a bacterium belonging to the genus *Aureobasidium* sp. are further enhanced, and a constipation-relieving drug, an immunopotentiator and a skin moistening agent using the composition A composition containing  $\beta$ - glucan, which contains a culture medium containing  $\beta$ -1,3-1,6- glucan obtained by culturing a bacterium belonging to the *Aureobasidium* sp. together with lactic acid bacterium cells, is obtained. This composition containing  $\beta$ - glucan is employed as the active ingredient of a constipation-relieving drug, an immunopotentiator and a skin moistening agent. As the above-described bacterium belonging to the genus *Aureobasidium* sp., *Aureobasidium pullulans* M-1 (FERM BP-08615) is preferable. As the above-described lactic acid bacterium, *Enterococcus faecalis* is preferable. It is still preferable that this lactic acid bacterium has been killed by heating. The content of the culture medium in solid matters preferably ranges from 1 to 80% by mass in terms of  $\beta$ -1,3-1,6- glucan, while the content of the lactic acid bacterium cells preferably ranges from 4 to 95% by mass.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT.

L2 ANSWER 12 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:514189 CAPLUS  
 DOCUMENT NUMBER: 141:187425

TITLE: Identification and characterization of the novel LysM domain-containing surface protein Sep from Lactobacillus fermentum BR11 and its use as a peptide fusion partner in Lactobacillus and Lactococcus

AUTHOR(S): Turner, Mark S.; Hafner, Louise M.; Walsh, Terry; Giffard, Philip M.

CORPORATE SOURCE: Infectious Diseases Program, School of Life Sciences, Faculty of Science, Queensland University of Technology, Brisbane, Australia

SOURCE: Applied and Environmental Microbiology (2004), 70(6), 3673-3680  
CODEN: AEMIDF; ISSN: 0099-2240

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Examination of supernatant fractions from broth cultures of *L. fermentum* BR11 revealed the presence of a number of proteins, including a 27-kDa protein termed Sep. The amino-terminal sequence of Sep was determined, and the gene encoding it was cloned and sequenced. Sep is a 205-amino-acid protein and contains a 30-amino-acid secretion signal and has overall homol. (39-92% identity) with similarly sized proteins of *Lactobacillus reuteri*, *Enterococcus faecium*, *Streptococcus pneumoniae*, *Streptococcus agalactiae*, and *Lactobacillus plantarum*. The carboxy-terminal 81 amino acids of Sep also have strong homol. (86% identity) to the carboxy termini of the aggregation-promoting factor (APF) surface proteins of *Lactobacillus gasseri* and *Lactobacillus johnsonii*. The mature amino terminus of Sep contains a putative peptidoglycan-binding LysM domain, thereby making it distinct from APF proteins. We have identified a common motif within LysM domains that is shared with carbohydrate binding YG motifs which are found in streptococcal glucan-binding proteins and glucosyltransferases. Sep was investigated as a heterologous peptide expression vector in *L. fermentum*, *Lactobacillus rhamnosus* GG and *Lactococcus lactis* MG1363. Modified Sep containing an amino-terminal 6-histidine epitope was found associated with the cells but was largely present in the supernatant in the *L. fermentum*, *L. rhamnosus*, and *L. lactis* hosts. Sep as well as the previously described surface protein BspA were used to express and secrete in *L. fermentum* or *L. rhamnosus* a fragment of human E-cadherin, which contains the receptor region for *Listeria monocytogenes*. This study demonstrates that Sep has potential for heterologous protein expression and export in lactic acid bacteria.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 13 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:971270 CAPLUS

DOCUMENT NUMBER: 140:19788

TITLE: Method for drying biomaterials

INVENTOR(S): Johal, Sarjit

PATENT ASSIGNEE(S): Grain Processing Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 10 pp.  
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003228296	A1	20031211	US 2003-371730	20030221
US 2006029577	A1	20060209	US 2005-235032	20050926
PRIORITY APPLN. INFO.:			US 2002-358633P	P 20020221
			US 2003-371730	A3 20030221

AB The present invention provides a means to concentrate, dry and formulate biomaterials such as polysaccharides, gums and related biopolymers, and microorganisms such as cells, spores, and the like from dilute solns. using

spent germ and other oil bearing residues. In addition, the spent germ can serve as a carrier for such biomaterials. The sorbed materials are useful in animal feeds. Scleroglucan was dried by using spent corn germ with excellent hydration/viscosity.

L2 ANSWER 14 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:931205 CAPLUS  
 DOCUMENT NUMBER: 139:386260  
 TITLE: Glucan-based vaccines  
 INVENTOR(S): Polonelli, Luciano; Cassone, Antonio  
 PATENT ASSIGNEE(S): Italy  
 SOURCE: PCT Int. Appl., 42 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003097091	A2	20031127	WO 2003-IB2460	20030515
WO 2003097091	A3	20040304		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2485847	A1	20031127	CA 2003-2485847	20030515
AU 2003241104	A1	20031202	AU 2003-241104	20030515
EP 1506009	A2	20050216	EP 2003-730424	20030515
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005535298	T	20051124	JP 2004-505087	20030515
US 2005208079	A1	20050922	US 2005-514483	20050526
US 2007141088	A1	20070621	US 2007-701250	20070201
PRIORITY APPLN. INFO.:			GB 2002-11118	A 20020515
			WO 2003-IB2460	W 20030515
			US 2005-514483	A3 20050526

AB Anti-glucan antibodies have been found to be protective against systemic fungal infection with *C. albicans*, but the protective efficacy can be inhibited by blocking antibodies. The invention provides an immunogenic composition comprising a glucan and a pharmaceutically acceptable carrier, characterized in that, when administered to a mammalian recipient, the composition elicits protective anti-glucan antibodies but does not elicit antibodies which inhibit the protective efficacy of the anti-glucan antibodies. The glucan may be presented on the surface of a protease-treated microbial cell or may be presented as a protein-glucan conjugate. The glucan may be substituted by a glucan mimotope, a peptidomimetic of a glucan mimotope, or nucleic acid encoding a mimotope. Anti-glucan-antibodies show broad spectrum microbicidal activity.  $\beta$ -glucans are preferred, particularly those containing one or more  $\beta$ -1,6 linkages.

L2 ANSWER 15 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:796878 CAPLUS  
 DOCUMENT NUMBER: 139:306530  
 TITLE: Flt3-ligand for enhancing immune response of vaccine against cancer, allergy and infection  
 INVENTOR(S): Mckenna, Hilary J.; Liebowitz, David N.; Maliszewski,

PATENT ASSIGNEE(S): Charles R.  
 SOURCE: Immunex Corporation, USA  
 PCT Int. Appl., 96 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003083083	A2	20031009	WO 2003-US9773	20030326
WO 2003083083	A3	20040624		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2480128 A1 20031009 CA 2003-2480128 20030326 AU 2003224810 A1 20031013 AU 2003-224810 20030326 US 2004022760 A1 20040205 US 2003-401364 20030326 EP 1487477 A2 20041222 EP 2003-721501 20030326 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK JP 2005528373 T 20050922 JP 2003-580519 20030326 MX 2004PA09394 A 20050125 MX 2004-PA9394 20040924 PRIORITY APPLN. INFO.: US 2002-368263P P 20020326 US 2002-427835P P 20021119 WO 2003-US9773 W 20030326				

AB The present invention relates to methods of using Flt3-ligand (Flt3-L) in immunization protocols to enhance immune responses against vaccine antigens. Embodiments include administering Flt3-ligand prior to immunizing a subject with a vaccine, wherein the vaccine comprises at least one antigen formulated in one or more adjuvants. Methods of treating and preventing cancer, allergy and infection using Flt3-ligand immunization protocols are also provided. Methods of using Flt3-ligand immunization protocols for in vivo evaluation of antigens and adjuvants are also provided.

L2 ANSWER 16 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:696036 CAPLUS  
 DOCUMENT NUMBER: 139:229690  
 TITLE: Micronutrient combination product with pro- and prebiotics.  
 INVENTOR(S): Glagau, Kristian; Schmidt, Michael  
 PATENT ASSIGNEE(S): Orthomol Pharmazeutische Vertriebs GmbH, Germany  
 SOURCE: Ger. Offen., 8 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10206995	A1	20030904	DE 2002-10206995	20020219
PRIORITY APPLN. INFO.: DE 2002-10206995 20020219 AB A probiotics-containing micronutrient combination product comprises at least two product portions with various composition, whereby the first portion has probiotics as active ingredients and the second portion has a prebiotic.				

with trace elements, vitamins and secondary plant materials.

L2 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2003:472991 CAPLUS  
DOCUMENT NUMBER: 139:35076  
TITLE: Glycoconjugate vaccines for use in immune-compromised populations  
INVENTOR(S): Fattom, Ali I.; Naso, Robert B.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 11 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003113350	A1	20030619	US 2001-955585	20010919
CA 2460749	A1	20030731	CA 2002-2460749	20020919
WO 2003061558	A2	20030731	WO 2002-US29601	20020919
WO 2003061558	A3	20030912		
WO 2003061558	A9	20040610		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1427442	A2	20040616	EP 2002-806591	20020919
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002012554	A	20041019	BR 2002-12554012554	20020919
JP 2005515237	T	20050526	JP 2003-561504	20020919
CN 1638794	A	20050713	CN 2002-818423	20020919
IN 2004MN00173	A	20050429	IN 2004-MN173	20040311
ZA 2004002185	A	20050425	ZA 2004-2185	20040318
MX 2004PA02624	A	20050217	MX 2004-PA2624	20040319
US 2006188518	A1	20060824	US 2006-338900	20060125
PRIORITY APPLN. INFO.: US 2001-955585 A 20010919				
WO 2002-US29601 W 20020919				

AB Staphylococcal and Enterococcal glycoconjugate vaccines are disclosed for use in preventing or treating bacterial infection in an immune-compromised individual. Such vaccines contain an immunocarrier and a conjugate of a polysaccharide or glycopeptide surface antigen from a clin.-significant bacterial strain. The vaccines can be used for active protection in immune-compromised individuals who are to be subjected to conditions that place them at immediate risk of developing a bacterial infection, as would be the case in the context of a catheterization or a surgical procedure.

L2 ANSWER 18 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2003:460563 CAPLUS  
DOCUMENT NUMBER: 139:41813  
TITLE: Prophylactic and therapeutic agents and protease-formation inhibitors for treatment of periodontal diseases, and bad breath- and tooth decay-preventing agents  
INVENTOR(S): Kawada, Masahiro; Ono, Hiroshi; Matsumura, Eiko; Imai, Tatsuya  
PATENT ASSIGNEE(S): Biofermin Pharmaceutical Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

DOCUMENT TYPE: CODEN: JKXXAF  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: Japanese  
 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003171292	A	20030617	JP 2001-365278	20011129
PRIORITY APPLN. INFO.:			JP 2001-365278	20011129

AB Title agents contain (A) Bifidobacterium, lactic acid bacteria, or butyric acid bacteria and (B) sugars utilized by the bacteria. Thus, a mixture of *Streptococcus faecalis* 129BI03B, *Lactobacillus acidophilus* KS13, B. bifidum G9-1, and periodontal disease-causing *Porphyromonas gingivalis* was inoculated to glucose-containing GAM medium and anaerobically incubated to show strong antibacterial activity against the causative bacteria.

L2 ANSWER 19 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:396635 CAPLUS  
 DOCUMENT NUMBER: 138:398641  
 TITLE: Genes associated with antibiotic resistance in biofilms and their use in development of antibiotics against biofilms  
 INVENTOR(S): O'Toole, George A.; Mah, Thien-Fah  
 PATENT ASSIGNEE(S): Dartmouth College, USA  
 SOURCE: PCT Int. Appl., 102 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003041483	A2	20030522	WO 2002-US29565	20020918
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002363630	A1	20030526	AU 2002-363630	20020918
US 2003166030	A1	20030904	US 2002-246330	20020918
US 7109294	B2	20060919		

PRIORITY APPLN. INFO.:

US 2001-323241P	P	20010918
WO 2002-US29565	W	20020918

AB Genes encoding proteins that are shown to play a role, direct or indirect, in microbial resistance of an organism in a biofilm are identified for use in development of antibiotics effective against biofilms. Methods of identifying a compound that modulates antibiotic resistance in a biofilm, and methods of identifying genes that encode proteins that play a role, direct or indirect, in biofilm resistance. Biofilms of *Pseudomonas aeruginosa* showing a 50-fold greater resistance to tobramycin than planktonic cultures were established. Genes directly affecting biofilm tobramycin resistance were identified by transposon mutagenesis. Candidates were screened for normal growth phenotypes and antibiotic resistance in planktonic cultures. One of the genes was similar to the *ndvB* gene of *Bradyrhizobium japonicum* and could complement mutations in the gene in *Sinorhizobium meliloti*. The cyclic glucans appear to play a role in resistance to tobramycin by direct interaction. A second gene similar to a component of a multidrug efflux pump was

identified.

L2 ANSWER 20 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2003:112902 CAPLUS  
DOCUMENT NUMBER: 138:131082  
TITLE:  $\beta$ - Glucans and lactobacillus products as  
antibacterial agents and health foods  
INVENTOR(S): Takekawa, Wakoto; Suga, Tatsuhiko  
PATENT ASSIGNEE(S): Konbi K. K., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003040785	A	20030213	JP 2002-145675	20020521
SG 93936	A1	20030121	SG 2002-2671	20020503
TW 230611	B	20050411	TW 2002-91110088	20020515
CN 1386510	A	20021225	CN 2002-121607	20020521
PRIORITY APPLN. INFO.:			JP 2001-150643	A 20010521

AB  $\beta$ - Glucans from fruiting body of fungus, including Agaricus  
blazei Murill, and processed products from bacterium, yeast, mushrooms,  
seaweeds, lichens, lactobacillus, and/or Enterococcus faecalis  
are claimed as antibacterial agents and health foods with immunostimulant  
actions.

L2 ANSWER 21 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2002:964504 CAPLUS  
DOCUMENT NUMBER: 138:34109  
TITLE: Use of phagocytes for detection of infectious bacteria  
by in situ hybridization, drug screening, and other  
clinical applications  
INVENTOR(S): Ohno, Tsuneya; Matsuhisa, Akio; Keshi, Hiroyuki; Abe,  
Kanao; Sugimoto, Norihiko; Ueyama, Hiroshi; Eda,  
Soji; Uehara, Hiotsugu; Iwami, Takahisa; Yamamoto,  
Seiji; Araki, Hiromasa  
PATENT ASSIGNEE(S): Fuso Pharmaceutical Industries, Ltd., Japan  
SOURCE: PCT Int. Appl., 155 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002101037	A1	20021219	WO 2002-JP5106	20020527
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,				
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,				
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,				
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2447775	A1	20021219	CA 2002-2447775	20020527
AU 2002308892	A1	20021223	AU 2002-308892	20020527
EP 1403369	A1	20040331	EP 2002-778910	20020527
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EP 1795594	A2	20070613	EP 2007-4647	20020527

R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC,  
NL, PT, SE, TR

US 2007059687 A1 20070315 US 2004-479027 20040910  
PRIORITY APPLN. INFO.: JP 2001-165954 A 20010531  
EP 2002-778910 A3 20020527  
WO 2002-JP5106 W 20020527

AB Phagocytes ingesting foreign microorganism, preparation, and methods and kits for their uses, are disclosed. In vitro evaluation of phagocytosis function, immune function, efficiency of phagocyte differentiation, screening of phagocytosis function modulators, are claimed. Immune response of patients undergoing radiotherapy or chemotherapy may be evaluated, by examining the phagocytosis function of white blood cells. The authors report herein the detection of intracellular infectious bacteria in phagocyte-smears obtained from blood samples by in situ hybridization. A microorganism causative of an infection is quickly and highly sensitively detected and/or identified by obtaining phagocytes from a clin. specimen containing phagocytes, immobilizing the obtained phagocytes, treating the phagocytes so as to enhance the permeability of the phagocyte membrane and expose DNA of the microorganism causative of the infection, and then using DNA probes for in situ hybridization for detection. Use of surfactants, anionic surfactants, in particular, like sodium dodecylsulfate (SDS), is claimed. Phagocytes were immobilized on 3-aminopropyl triethoxysilane (APS)-coated slide, and treated with N-acetyl muramidase, lysozyme, lysostaphin, zymolase ( $\beta$ 1,3-glucan lanimaripentaohydrolase, lanimaripentaose), phenylmethyl sulfonylfluoride (PMSF)-containing DMSO (DMSO).

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 22 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:946505 CAPLUS

DOCUMENT NUMBER: 138:34094

TITLE: Detection of infectious bacteria in phagocyte-smears from blood by in situ hybridization

INVENTOR(S): Ohno, Tsuneya; Matsuhisa, Akio

PATENT ASSIGNEE(S): Fuso Pharmaceutical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 129 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002099133	A1	20021212	WO 2002-JP5107	20020527
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2447750	A1	20021212	CA 2002-2447750	20020527
AU 2002256921	A1	20021216	AU 2002-256921	20020527
EP 1403381	A1	20040331	EP 2002-726495	20020527
EP 1403381	B1	20070711		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 3934605	B2	20070620	JP 2003-502242	20020527
US 2006234219	A1	20061019	US 2004-479185	20040621
PRIORITY APPLN. INFO.:			JP 2001-165929	A 20010531
			WO 2002-JP5107	W 20020527



AB The authors report herein the detection of intracellular infectious bacteria in phagocyte-smears obtained from blood samples by in situ hybridization. A microorganism causative of an infection is quickly and highly sensitively detected and/or identified by obtaining phagocytes from a clin. specimen containing phagocytes originating in a living body, immobilizing the obtained phagocytes, treating the phagocytes so as to enhance the permeability of the phagocyte membrane and expose DNA of the microorganism causative of the infection, and then using DNA probes for in situ hybridization for detection. Use of surfactants, anionic surfactants, in particular, like sodium dodecylsulfate (SDS), is claimed. Phagocytes were immobilized on 3-aminopropyl triethoxysilane (APS)-coated slide, and treated with N-acetyl muramidase, lysozyme, lysostaphin, zymolase ( $\beta$ 1,3- glucan lanimaripentaohydrolase, lanimaripentaase), phenylmethyl sulfonylfluoride (PMSF)-containing DMSO (DMSO).

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 23 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:676289 CAPLUS

DOCUMENT NUMBER: 137:211942

TITLE: Drug design against drug resistant mutants using directed evolution and target protein conformation changes

INVENTOR(S): Stevens, Raymond C.; Orenicia, Maria C.; Yoon, Jun S.; Hanson, Michael A.

PATENT ASSIGNEE(S): The Scripps Research Institute, USA

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002068933	A2	20020906	WO 2002-US6238	20020227
WO 2002068933	A3	20021121		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2002254077	A1	20020912	AU 2002-254077	20020227
PRIORITY APPLN. INFO.:			US 2001-272248P	P 20010228
			WO 2002-US6238	W 20020227

AB The present invention provides methods for identifying new drugs and potential inhibitors and modulators of drug-resistant variants of a target protein of a drug of interest. A drug-resistant variant according to the invention has at least one mutation resulting in a structural change, an activity change or a stability change as compared to the target protein. Such variants would include natural variants such as those encountered in the clinic, but preferably variants are selected by directed evolution methodol. The present invention relates to methods for designing new drugs useful against drug-resistant bacterial cells, viruses, mammalian cells and the like. The method involves identifying a target protein of the drug, selecting for drug-resistant variants that have an altered target protein (variant protein) by directed evolution, determining the three dimensional structure of the target and variant proteins and designing a new drug that can be effective against at least one drug-resistant variant. The present invention can be used to predict future mutations

that lead to drug resistance and the type of drugs that are effective to combat such resistance.

L2 ANSWER 24 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:445879 CAPLUS

DOCUMENT NUMBER: 137:62602

TITLE: In vitro fermentation of cereal dietary fibre carbohydrates by probiotic and intestinal bacteria

AUTHOR(S): Crittenden, Ross; Karppinen, Sirpa; Ojanen, Suvi; Tenkanen, Maija; Fagerstrom, Richard; Matto, Jaana; Saarela, Maria; Mattila-Sandholm, Tiina; Poutanen, Kaisa

CORPORATE SOURCE: VTT Biotechnology, FIN-02044, Finland

SOURCE: Journal of the Science of Food and Agriculture (2002), 82(8), 781-789

CODEN: JSFAAE; ISSN: 0022-5142

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A range of probiotic and other intestinal bacteria were examined for their ability to ferment the dietary fiber carbohydrates  $\beta$ -glucan, xylan, xylo-oligosaccharides (XOS) and arabinoxylan.  $\beta$ -Glucan was fermented by *Bacteroides* spp and *Clostridium beijerinckii* but was not fermented by lactobacilli, bifidobacteria, enterococci or *Escherichia coli*. Unsubstituted xylan was not fermented by any of the probiotic bacteria examined. However, many *Bifidobacterium* species and *Lactobacillus brevis* were able to grow to high yields using XOS. XOS were also efficiently fermented by some *Bacteroides* isolates but not by *E. coli*, enterococci, *Clostridium difficile*, *Clostridium perfringens* or by the majority of intestinal *Lactobacillus* species examined. *Bifidobacterium longum* strains were able to grow well using arabinoxylan as the sole carbon source. These organisms hydrolyzed and fermented the arabinosyl residues from arabinoxylan but did not substantially utilize the xylan backbone of the polysaccharide. Arabinoxylan was not fermented by lactobacilli, enterococci, *E. coli*, *C. perfringens* or *C. difficile* and has potential to be an applicable carbohydrate to complement probiotic *Bif. longum* strains in synbiotic combinations.

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 25 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:10211 CAPLUS

DOCUMENT NUMBER: 136:69089

TITLE: Confectionery product containing active ingredients

INVENTOR(S): Bell, David Alan; Pickford, Emma

PATENT ASSIGNEE(S): Societe des Produits Nestle S.A., Switz.

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002000033	A1	20020103	WO 2001-EP6363	20010606
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

CA 2415836	A1	20020103	CA 2001-2415836	20010606
EP 1299005	A1	20030409	EP 2001-962709	20010606
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
SI 21017	A	20030430	SI 2001-20035	20010606
BR 2001012094	A	20030506	BR 2001-12094	20010606
HU 200301292	A2	20030828	HU 2003-1292	20010606
JP 2004500003	T	20040108	JP 2002-504827	20010606
NZ 523806	A	20041029	NZ 2001-523806	20010606
TR 200202737	T2	20041221	TR 2002-2737	20010606
RU 2277792	C2	20060620	RU 2003-102630	20010606
NO 2002006037	A	20030206	NO 2002-6037	20021216
IN 2002CN02104	A	20050225	IN 2002-CN2104	20021218
US 2003138520	A1	20030724	US 2002-328913	20021220
MX 2003PA00007	A	20030527	MX 2003-PA7	20030107
ZA 2003000791	A	20040219	ZA 2003-791	20030129
AU 2006225267	A1	20061102	AU 2006-225267	20061006
PRIORITY APPLN. INFO.:			GB 2000-16173	A 20000630
			WO 2001-EP6363	W 20010606

AB A confectionery product, e.g. chocolate, contains one or more active ingredients characterized in that the active ingredients are incorporated in a plurality of carrier bodies dispersed within the body of the confectionery product.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 26 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:799022 CAPLUS

DOCUMENT NUMBER: 136:34585

TITLE: In vitro antimicrobial activities of bakuchiol against oral microorganisms

AUTHOR(S): Katsura, Harumi; Tsukiyama, Ryo-Ichi; Suzuki, Akiko; Kobayashi, Makio

CORPORATE SOURCE: Research Laboratory of Higashimaru Shoyu Co. Ltd., Tatsuno, 679-4193, Japan

SOURCE: Antimicrobial Agents and Chemotherapy (2001), 45(11), 3009-3013

CODEN: AMACCQ; ISSN: 0066-4804

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Bakuchiol was isolated from the seeds of *Psoralea corylifolia*, a tree native to China with various uses in traditional medicine, followed by extraction with ether and column chromatog. combined with silica gel and octyldecyl silane. In this study, the antimicrobial activities of bakuchiol against some oral microorganisms were evaluated in vitro. The cell growth of *Streptococcus mutans* was inhibited in a bakuchiol concentration-dependent manner, and growth of *S. mutans* was completely prevented

by 20 µg of bakuchiol per mL. The bactericidal effect of bakuchiol on *S. mutans* was dependent on temperature and stable under the following conditions: sucrose, 0 to 10% (wt/vol); pH, 3.0 to 7.0; organic acids (3% [wt/vol] citric and malic acids). Bakuchiol showed bactericidal effects against all bacteria tested, including *S. mutans*, *Streptococcus sanguis*, *Streptococcus salivarius*, *Streptococcus sobrinus*, *Enterococcus faecalis*, *Enterococcus faecium*, *Lactobacillus acidophilus*, *Lactobacillus casei*, *Lactobacillus plantarum*, *Actinomyces viscosus*, and *Porphyromonas gingivalis*, with MICs ranging from 1 to 4 µg/mL and the sterilizing concentration for 15 min ranging from 5 to 20 µg/mL. Furthermore, bakuchiol was also effective against adherent cells of *S. mutans* in water-insol. glucan in the presence of sucrose and inhibited the reduction of pH in the broth. Thus, bakuchiol would be a useful compound for development of antibacterial agents against oral pathogens and has great potential for use in food additives and mouthwash for preventing and treating dental caries.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 27 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2001:56493 CAPLUS  
DOCUMENT NUMBER: 134:262664  
TITLE: Isolation of an 1,3-1,4- $\beta$ - glucan  
degrading Enterococcus faecium strain from  
the intestinal tract of chicken and partial  
characterization of its novel 1,3-1,4- $\beta$ -glucanase  
AUTHOR(S): Beckmann, L.; Vahjen, W.; Simon, O.  
CORPORATE SOURCE: Faculty of Veterinary Medicine, Free University of  
Berlin, Berlin, Germany  
SOURCE: Journal of Basic Microbiology (2000), 40(5-6), 303-310  
CODEN: JBMIEQ; ISSN: 0233-111X  
PUBLISHER: Wiley-VCH Verlag Berlin GmbH  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB An Enterococcus faecium strain with a novel endo  
1,3-1,4-endo- $\beta$ -glucanase (lichenase, E.C. 3.2.1.73) was isolated from  
the intestinal tract of broiler chicken. The enzyme was secreted into the  
culture medium and acted exclusively on mixed linked 1,3-1,4- $\beta$ -  
glucans as determined with a reducing sugar assay. The purified enzyme  
has its isoelec. point at pI 4.8, maximum activity was determined at pH 6.5 and  
40°. Thermal stability of the enzyme was low, but high pH  
stability and high residual activity was observed after incubation in digesta  
samples from the chicken intestine. Multiple lichenase activities were  
obtained from culture supernatants on SDS-PAGE and native zymograms, but  
it is concluded that the lichenase consists of one active protein at 30.5  
kDa and addnl. polypeptides of unknown function.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 28 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2000:190936 CAPLUS  
DOCUMENT NUMBER: 132:231933  
TITLE: Compositions of  $\beta$ - glucans and specific  
IgIV  
INVENTOR(S): Pavliak, Viliam; Fattom, Ali Ibrahim; Naso, Robert B.  
PATENT ASSIGNEE(S): Nabi, USA  
SOURCE: PCT Int. Appl., 37 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000015238	A1	20000323	WO 1999-US20787	19990914
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,				
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,				
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,				
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,				
TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,				
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,				
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2344166	A1	20000323	CA 1999-2344166	19990914
AU 9960332	A	20000403	AU 1999-60332	19990914
EP 1121135	A1	20010808	EP 1999-969030	19990914
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO				
US 6355625	B1	20020312	US 1999-395360	19990914
MX 2001PA02668	A	20020208	MX 2001-PA2668	20010314

US 2002131969 A1 20020919 US 2002-79537 20020222  
 US 7030101 B2 20060418  
 PRIORITY APPLN. INFO.: US 1998-100146P P 19980914  
 US 1999-395360 A1 19990914  
 WO 1999-US20787 W 19990914

AB Compns. and kits comprising combinations of  $\beta$ - glucans and specific Igs are disclosed. The compns. and kits are useful in methods of preventing or treating infection by a pathogenic microorganism, in which  $\beta$ - glucan is administered to a subject, and specific antibodies to a pathogenic microorganism are introduced into the subject. Results showed more than a 1 log reduction of S. aureus bacterial counts in whole blood incubated with glucan supplemented with AltaStaph (an IgIV preparation) while samples supplemented with standard IgIV displayed the

same level of activity obtained with  $\beta$ - glucan alone.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 29 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1999:222783 CAPLUS  
 DOCUMENT NUMBER: 130:222403  
 TITLE: Probiotic nutritional preparation  
 INVENTOR(S): Van Hoey-de-Boer, Klaske Anna; Hageman, Robert Johan Joseph  
 PATENT ASSIGNEE(S): N.V. Nutricia, Neth.  
 SOURCE: Eur. Pat. Appl., 9 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 904784	A1	19990331	EP 1997-202900	19970922
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.			EP 1997-202900	19970922
AB The invention relates to a nutritional preparation with health promoting action, in particular with respect to the prevention and treatment of disorders of the gastrointestinal tract, comprising 106-1014, preferably 107-1013 viable cells, per g of the total preparation, of each of the following microorganisms: Bifidobacterium; Enterococcus faecium; and a Lactobacillus strain that produces predominantly dextro-rotary lactate. The nutritional preparation can further comprise a corresponding amount of cells of a Lactococcus strain or a Micrococcus strain. Also, the preparation preferably contains prebiotic compds., as well as substances that inhibit bacterial adhesion to the wall of the gastrointestinal tract. The preparation can be in the form of a food supplement, a ready-to-use food composition, an infant formula or a tube feeding.				

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 30 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1999:136785 CAPLUS  
 DOCUMENT NUMBER: 130:179870  
 TITLE: Novel lactic acid bacteria  
 INVENTOR(S): Oh, Jong Suk  
 PATENT ASSIGNEE(S): S. Korea  
 SOURCE: PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9907826	A1	19990218	WO 1998-KR191	19980702
W: AU, BR, CA, CN, IL, JP, MX, TR				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6036952	A	20000314	US 1998-14436	19980127
CA 2299627	A1	19990218	CA 1998-2299627	19980702
AU 9881312	A	19990301	AU 1998-81312	19980702
AU 752706	B2	20020926		
EP 1002052	A1	20000524	EP 1998-931104	19980702
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
TR 200000360	T2	20000721	TR 2000-200000360	19980702
BR 9814737	A	20001003	BR 1998-14737	19980702
JP 2001512670	T	20010828	JP 2000-506311	19980702
MX 200001347	A	20020311	MX 2000-1347	20000207
US 2003077814	A1	20030424	US 2002-122543	20020415

## PRIORITY APPLN. INFO.:

KR 1997-37819	A	19970807
KR 1998-213	A	19980107
KR 1998-19512	A	19980528
US 1998-14436	A2	19980127
WO 1998-KR191	W	19980702
US 2000-492991	B3	20000127

AB Enterococcus spp. 1357, Lactobacillus spp. V20 and Lactococcus spp. 1370, and H2O2-producing streptococci have a potent and lasting inhibitory activity on the production of water-insol. glucan (mutan) and dental plaque in human mouth or the growth of anaerobic bacteria causing gingivitis, periodontitis, and halitosis.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 31 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:42584 CAPLUS  
DOCUMENT NUMBER: 130:105323  
TITLE: Control of acidic gut syndrome with an agent controlling acid and endotoxin accumulation in the gastrointestinal tract  
INVENTOR(S): Rowe, James Baber  
PATENT ASSIGNEE(S): Australia  
SOURCE: PCT Int. Appl., 59 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9900136	A1	19990107	WO 1998-AU495	19980626
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2294904	A1	19990107	CA 1998-2294904	19980626
AU 9880931	A	19990119	AU 1998-80931	19980626
AU 746054	B2	20020411		
EP 1017402	A1	20000712	EP 1998-930541	19980626
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO

BR 9810944	A	20000926	BR 1998-10944	19980626
JP 2002511865	T	20020416	JP 1999-505159	19980626
NZ 502445	A	20030328	NZ 1998-502445	19980626
MX 200000064	A	20010123	MX 2000-64	20000103
US 6303572	B1	20011016	US 2000-446801	20000210
US 6468964	B1	20021022	US 2001-912886	20010725

PRIORITY APPLN. INFO.:

AU 1997-7582	A	19970627
WO 1998-AU495	W	19980626
US 2000-446801	A3	20000210

AB A method is provided for the treatment or prophylaxis of acidic gut syndrome resulting from the accumulation of acid and production of endotoxin in the gastrointestinal tract of a human or an animal, the accumulation resulting from the fermentation of carbohydrate in the gastrointestinal tract of

the human or animal. The method comprises administering to said human or animal an effective amount of an active agent capable of preventing or controlling acid and endotoxin accumulation in the gastrointestinal tract.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 32 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:660307 CAPLUS

DOCUMENT NUMBER: 127:342438

TITLE: Isolation and overexpression of a gene encoding an extracellular  $\beta$ -(1,3-1,4)-glucanase from *Streptococcus bovis* JB1

AUTHOR(S): Ekinci, M. Sait; McCrae, Sheila I.; Flint, Harry J.

CORPORATE SOURCE: Rowett Research Institute, Aberdeen, AB21 9SB, UK

SOURCE: Applied and Environmental Microbiology (1997), 63(10), 3752-3756

CODEN: AEMIDF; ISSN: 0099-2240

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB *Streptococcus bovis* JB1 was found to produce a 25-kDa extracellular enzyme active against  $\beta$ -(1,3-1,4)-glucans. A gene was isolated encoding a specific  $\beta$ -(1,3-1,4)-glucanase that corresponds to this size and belongs to glycoside hydrolase family 16. A 4- to 10-fold increase in supernatant  $\beta$ -glucanase activity was obtained when the cloned  $\beta$ -glucanase gene was reintroduced into *S. bovis* JB1 by use of constructs based on the plasmid vector pTRW10 or pIL253. The  $\beta$ -(1,3-1,4)-glucanase gene was also expressed upon introduction of the pTRW10 construct pTRWL1R into *Lactococcus lactis* IL2661 and *Enterococcus faecalis* JH2-SS, although extracellular activity was 8- to 50-fold lower than that in *S. bovis* JB1. The  $\beta$ -(1,3-1,4)-glucanase purified from the culture supernatant of *S. bovis* JB1 carrying pTRWL1R showed a  $K_m$  of 2.8 mg per mL and a  $V_{max}$  of 338  $\mu$ mol of glucose equivalent per min per mg of protein with barley  $\beta$ -glucan as the substrate. The *S. bovis*  $\beta$ -(1,3-1,4)-glucanase may contribute to the ability of this bacterium to utilize starch by degrading structural polysaccharides present in endosperm cell walls.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

102.96

103.17

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-24.96

-24.96

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=> s glucan and "lactic acid"

1411 GLUCAN  
936 GLUCANS  
1807 GLUCAN  
(GLUCAN OR GLUCANS)  
11891 "LACTIC"  
4 "LACTICS"  
11892 "LACTIC"  
("LACTIC" OR "LACTICS")  
82378 "ACID"  
56596 "ACIDS"  
107197 "ACID"  
("ACID" OR "ACIDS")  
11041 "LACTIC ACID"  
("LACTIC" (W) "ACID")  
L3 48 GLUCAN AND "LACTIC ACID"

=> s glucan and enterococcus

1411 GLUCAN  
936 GLUCANS  
1807 GLUCAN  
(GLUCAN OR GLUCANS)  
1208 ENTEROCOCCUS  
L4 4 GLUCAN AND ENTEROCOCCUS

=> d l4 1-4

L4 ANSWER 1 OF 4 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 668106 FROSTI  
TI Constipation ameliorant and food and beverage containing the same  
IN Moriya N.; Moriya Y.; Suzuki K.  
PA Aureo Co. Ltd  
SO Japanese Patent Application  
PI A 20040930  
AI 20030307  
NTE 20040930  
DT Patent  
LA Japanese  
SL English



L4 ANSWER 2 OF 4 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 666289 FROSTI  
 TI Compositions and methods for treatment or prevention of psoriasis and related disorders.  
 IN Conway P.L.  
 PA VRI Biomedical Ltd  
 SO PCT Patent Application  
 PI WO 2005030230 A1  
 AI 20040930  
 PRAI Australia 20030930  
 DT Patent  
 LA English  
 SL English

L4 ANSWER 3 OF 4 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 526897 FROSTI  
 TI Novel lactic acid bacteria.  
 IN Oh J.S.  
 SO European Patent Application  
 PI EP 1002052 A1  
 WO 9907826 19990218  
 AI 19980702  
 PRAI Korea, Republic of 19970807; 19980107; 19980528  
 DT Patent  
 LA English  
 SL English

L4 ANSWER 4 OF 4 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 491122 FROSTI  
 TI Novel lactic acid bacteria.  
 IN Oh J.S.  
 SO PCT Patent Application  
 PI WO 9907826 A1  
 AI 19980702  
 PRAI Korea, Republic of 19970807; 19980107; 19980528  
 DT Patent  
 LA English  
 SL English

=> d 13 1-48

L3 ANSWER 1 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 720256 FROSTI  
 TI Influence of the carbohydrate source on beta-glucan production and enzyme activities involved in sugar metabolism in *Pediococcus parvulus* 2.6.  
 AU Velasco S.E.; Yebra M.J.; Monedero V.; Ibarburu I.; Duenas M.T.; Irastorza A.  
 SO International Journal of Food Microbiology, 2007, (April 20), 115 (3), 325-334 (33 ref.)  
 ISSN: 0168-1605  
 DT Journal  
 LA English  
 SL English

L3 ANSWER 2 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 712869 FROSTI  
 TI Glucan and fructan production by sourdough *Weissella cibaria* and *Lactobacillus plantarum*.  
 AU di Cagno R.; de Angelis M.; Limitone A.; Minervini F.; Carnevali P.; Corsetti A.; Gaenzle M.; Ciati R.; Gobetti M.  
 SO Journal of Agricultural and Food Chemistry, 2006, (December 27), 54 (26), 9873-9881 (56 ref.)

ISSN: 0021-8561

DT Journal  
LA English  
SL English

L3 ANSWER 3 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 709156 FROSTI  
TI Microbial polysaccharides.  
AU Giavasis I.; Biliaderis C.G.  
SO Functional food carbohydrates., Published by: CRC Press, Boca Raton,  
2006, 167-213 (224 ref.)  
Biliaderis C.G.; Izydorczyk M.S.  
ISBN: 0-8493-1822-X

DT Book Article  
LA English

L3 ANSWER 4 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 701583 FROSTI  
TI Roughage times ahead - fiber fortification done right.  
AU Decker K.J.  
SO Food Product Design, 2006, (March), 16 (3), 73-87 (10pp) (0 ref.)  
DT Journal  
LA English

L3 ANSWER 5 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 698887 FROSTI  
TI Lactobacillus reuteri glucosyltransferase.  
IN van Geel-Schutten G.H.; Dijkhuizen L.; Rahaoui H.; Leer R.J.  
PA Nederlandse Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek  
TNO  
SO European Patent Application  
PI EP 1672074 A1  
AI 20010523  
PRAI European Patent Office 20000525  
DT Patent  
LA English  
SL English

L3 ANSWER 6 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 695332 FROSTI  
TI Pediococcus parvulus gtf gene encoding the GTF glycosyltransferase and  
its application for specific PCR detection of beta-D-glucan  
-producing bacteria in foods and beverages.  
AU Werning M.L.; Ibarbura I.; Duenas M.T.; Irastorza A.; Navas J.; Lopez P.  
SO Journal of Food Protection, 2006, (January), 69 (1), 161-169 (30 ref.)  
ISSN: 0362-028X  
DT Journal  
LA English  
SL English

L3 ANSWER 7 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 691305 FROSTI  
TI (Food research and development.)  
AU Anon.  
SO Emerging Food R&D Report, 2006, (March), 16 (12), 1-8 (0 ref.)  
DT Journal  
LA English

L3 ANSWER 8 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 679289 FROSTI  
TI Exopolysaccharides of lactic acid bacteria.  
AU Hallemeersch I.; de Baets S.; Vandamme E.J.  
SO Polysaccharides and polyamides in the food industry: properties,  
production and patents, volume 1: polysaccharides., Published by:  
Wiley-VCH, Weinheim, 2005, 257-279 (83 ref.)

Steinbuchel A.; Rhee S.K.

ISBN: 3-527-31345-1

DT Book Article

LA English

L3 ANSWER 9 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN

AN 677606 FROSTI

TI Application of pure and mixed probiotic lactic acid bacteria and yeast cultures for oat fermentation.

AU Angelov A.; Gotcheva V.; Hristozova T.; Gargova S.

SO Journal of the Science of Food and Agriculture, 2005, (September), 85 (12), 2134-2141 (41 ref.)

Published by: John Wiley & Sons Ltd. Website: <http://www.wiley.co.uk/sci> or [www.interscience.wiley.com](http://www.interscience.wiley.com)

ISSN: 0022-5142

DT Journal

LA English

SL English

L3 ANSWER 10 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN

AN 677029 FROSTI

TI Highly hydrolytic reuteransucrase from probiotic *Lactobacillus reuteri* strain ATCC 55730.

AU Kralj S.; Stripling E.; Sanders P.; van Geel-Schutten G.H.; Dijkhuizen L.

SO Applied and Environmental Microbiology, 2005, (July), 71 (7), 3942-3950 (30 ref.)

Published by: American Society for Microbiology (ASM). Website: <http://www.journals.asm.org> or [www.asmta.org](http://www.asmta.org)

ISSN: 0099-2240

DT Journal

LA English

L3 ANSWER 11 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN

AN 676046 FROSTI

TI Novel polysaccharides

AU van der Maarel M.; van Geel-Schutten I.

SO World of Food Ingredients, 2005, (April-May), 58+60-61 (12 ref.)

Published by: C & S Publishers. Website: <http://www.foodingredientsfirst.com>

ISSN: 1566-6611

DT Journal

LA English

L3 ANSWER 12 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN

AN 675910 FROSTI

TI Digestion of barley malt porridges in a gastrointestinal model: iron dialysability, iron uptake by Caco-2 cells and degradation of beta-glucan.

AU Haraldsson A.-K.; Rimsten L.; Alminger M.; Andersson R.; Aman P.; Sandberg A.-S.

SO Journal of Cereal Science, 2005, 42 (2), 243-254 (many ref.)

Published by: Academic Press. Website: <http://www.elsevier.com/locate/jnlabr/yjcrs>

ISSN: 0733-5210

DT Journal

LA English

SL English

L3 ANSWER 13 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN

AN 668106 FROSTI

TI Constipation ameliorant and food and beverage containing the same.

IN Moriya N.; Moriya Y.; Suzuki K.

PA Aureo Co. Ltd

SO Japanese Patent Application

PI A 20040930

AI 20030307  
NTE 20040930  
DT Patent  
LA Japanese  
SL English

L3 ANSWER 14 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 661264 FROSTI  
TI A putative glucan synthase gene dps detected in  
exopolysaccharide-producing *Pediococcus damnosus* and *Oenococcus oeni*  
strains isolated from wine and cider.  
AU Walling E.; Gindreau E.; Lonvaud-Funel A.  
SO International Journal of Food Microbiology, 2005, (January 15), 98 (1),  
53-62 (25 ref.)  
Published by: Elsevier Science. Website: <http://www.elsevier.com/locate/ijfoodmicro>  
ISSN: 0168-1605  
DT Journal  
LA English  
SL English

L3 ANSWER 15 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 653866 FROSTI  
TI Bringing health to the European marketplace.  
AU Heinonen M.  
SO New Food, 2004, 7 (4), 48-51 (0 ref.)  
Published by: <http://www.russellpublishing.com>  
ISSN: 1461-4642  
DT Journal  
LA English  
SL English

L3 ANSWER 16 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 652778 FROSTI  
TI Functional foods, cardiovascular disease and diabetes.  
AU Arnoldi A.  
SO Published by: Woodhead Publishing Ltd, Cambridge, 2004, 488pp  
ISBN: 1-85573-735-3  
DT Book  
LA English

L3 ANSWER 17 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 651379 FROSTI  
TI Dietary fibre in fermented oat and barley beta-glucan rich  
concentrates.  
AU Lambo A.M.; Oste R.; Nyman M.E.G.-L.  
SO Food Chemistry, 2005, (February), 89 (2), 283-293 (48 ref.)  
Published by: Web: [www.elsevier.nl/locate/foodchem](http://www.elsevier.nl/locate/foodchem)  
ISSN: 0308-8146  
DT Journal  
LA English  
SL English

L3 ANSWER 18 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 644936 FROSTI  
TI Application of biological acidification to improve the quality and  
processability of wort produced from 50 percent raw barley.  
AU Lowe D.P.; Ulmer H.M.; van Sinderen D.; Arendt E.K.  
SO Journal of the Institute of Brewing, 2004, 110 (2), 133-140 (41 ref.)  
Published by: <http://shokkako.ac.affrc.go.jp/index.html>  
ISSN: 0046-9750  
DT Journal  
LA English  
SL English

L3 ANSWER 19 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 640237 FROSTI  
 TI Process of producing mannitol and homopolysaccharides.  
 IN van Geelschutten G.H.; Binnema D.J.; van der Maarel M.J.E.C.  
 PA Nederlandse Organisatie voor Toegepastnatuurwetenschappelijk Onderzoek  
 TNO  
 SO European Patent Application  
 PI EP 1417326 A1  
 WO 2003010325 20030206  
 AI 20020724  
 PRAI European Patent Office 20010725  
 DT Patent  
 LA English  
 SL English

L3 ANSWER 20 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 638914 FROSTI  
 TI Phytate content is reduced and beta-glucanase activity suppressed in  
 malted barley steeped with lactic acid at high  
 temperature.  
 AU Haraldsson A.K.; Rimsten L.; Alminger M.L.; Andersson R.; Andlid T.; Aman  
 P.; Sandberg A.S.  
 SO Journal of the Science of Food and Agriculture, 2004, (May), 84 (7),  
 653-662 (35 ref.)  
 Published by: John Wiley & Sons Ltd. Address: Baffins Lane, Chichester,  
 West Sussex PO19 1UD, UK. Telephone: +44 (1243) 779777. Fax: +44 (1243)  
 775878. Email: customer@wiley.co.uk Web: www.wiley.co.uk/sci or  
 www.interscience.wiley.com  
 ISSN: 0022-5142  
 DT Journal  
 LA English  
 SL English

L3 ANSWER 21 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 638436 FROSTI  
 TI Glucans and glucansucrases derived from lactic  
 acid bacteria.  
 IN van Geel-Schutten G.H.  
 PA Nederlandse Organisatie voor Toegepastnatuur-Wetenschappelijk Onderzoek  
 TNO  
 SO European Patent Application  
 PI EP 1409708 A2  
 WO 2003008618 20030130  
 AI 20020722  
 PRAI European Patent Office 20010720; 20010725  
 DT Patent  
 LA English  
 SL English

L3 ANSWER 22 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 612232 FROSTI  
 TI Hand on heart.  
 AU Anon.  
 SO Food and Drink Technology, 2003, (May), 2 (5), 26-27 (0 ref.)  
 DT Journal  
 LA English

L3 ANSWER 23 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 609725 FROSTI  
 TI Comparison of growth characteristics and exopolysaccharide formation of  
 two lactic acid bacteria strains, *Pediococcus*  
*damnosus* 2.6 and *Lactobacillus brevis* G-77, in an oat-based, non-dairy  
 medium.  
 AU Martensson O.; Duenas-Chasco M.; Irastorza A.; Oste R.; Holst O.  
 SO Lebensmittel-Wissenschaft und -Technologie (LWT), 2003, 36 (3), 353-357

(21 ref.)

Published by: Academic Press. Address: 32 Jamestown Road, London NW1 7BY, UK. Telephone: +44 (20) 8308 5700. Web: [www.academicpress.com/lwt](http://www.academicpress.com/lwt) and [www.idealibrary.com](http://www.idealibrary.com)  
ISSN: 0023-6438

DT Journal  
LA English  
SL English

L3 ANSWER 24 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 606638 FROSTI  
TI In situ production of exopolysaccharides during sourdough fermentation by cereal and intestinal isolates of lactic acid bacteria.

AU Tieking M.; Korakli M.; Ehrmann M.A.; Ganzle M.G.; Vogel R.F.  
SO Applied and Environmental Microbiology, 2003, (February), 69 (2), 945-952 (48 ref.)  
Published by: American Society for Microbiology (ASM). Address: 1752 N St., N.W., Washington DC 20036-2804, USA. Telephone: +1 (202) 737 3600. Web: [www.journals.asm.org](http://www.journals.asm.org) or [www.asmta.org](http://www.asmta.org)  
ISSN: 0099-2240

DT Journal  
LA English  
SL English

L3 ANSWER 25 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 605308 FROSTI  
TI Process of producing mannitol and homopolysaccharides.  
IN van Geelschutten G.H.; Binnema D.J.; van der Maarel M.J.E.C.  
PA Nederlandse Organisatie voor Toegepastnatuurwetenschappelijk Onderzoek TNO

SO PCT Patent Application  
PI WO 2003010325 A1  
AI 20020724

PRAI European Patent Office 20010725

DT Patent  
LA English  
SL English

L3 ANSWER 26 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 604548 FROSTI  
TI Novel glucans and novel glucansucrases derived from lactic acid bacteria.  
IN van Geel-Schutten G.H.  
PA Nederlandse Organisatie voor Toegepastnatuur-Wetenschappelijk Onderzoek TNO

SO PCT Patent Application  
PI WO 2003008618 A2  
AI 20020722

PRAI European Patent Office 20010720; 20010725

DT Patent  
LA English  
SL English

L3 ANSWER 27 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 600487 FROSTI  
TI Glucan incorporating 4-, 6-, and 4, 6-linked anhydroglucose units.  
IN van Geel-Schutten G.H.; Dijkhuizen L.; Rahaoui H.; Leer R.-J.  
PA Nederlandse Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek TNO

SO United States Patent  
PI US 6486314 B 20021126  
AI 20000628

PRAI European Patent Office 20000525

NTE 20021126  
 DT Patent  
 LA English  
 SL English

L3 ANSWER 28 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 587673 FROSTI  
 TI Cell culture and food.  
 AU Johnson-Green P.  
 SO Introduction to food biotechnology., Published by: CRC Press, Boca Raton,  
 2002, 181-232 (27 ref.)  
 Johnson-Green P.  
 ISBN: 0-8493-1158-7  
 DT Book Article  
 LA English

L3 ANSWER 29 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 570780 FROSTI  
 TI Development of a germination process for producing high beta-  
 glucan, whole grain food ingredients from oat.  
 AU Wilhelmson A.; Oksman-Calentey K.-M.; Laitila A.; Kaukovirta-Norja A.;  
 Poutanen K.  
 SO Cereal Chemistry, 2001, (November-December), 78 (6), 715-720 (47 ref.)  
 Published by: American Association of Cereal Chemists Address: 3340  
 Pilot Knob Road, St. Paul, MN 55121-2097, USA Telephone: +1 (651) 454  
 7250 Fax: +1 (651) 454 0766 Web: www.scisoc.org/aacc  
 ISSN: 0009-0352  
 DT Journal  
 LA English  
 SL English

L3 ANSWER 30 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 570406 FROSTI  
 TI Homopolysaccharides from lactic acid bacteria.  
 AU Monсан P.; Bozonnet S.; Albenne C.; Joucla G.; Willemot R.-M.;  
 Remaud-Simeon M.  
 SO International Dairy Journal, 2001, 11 (9), 675-685 (99 ref.)  
 Published by: Elsevier Science Address: PO Box 211, 1000 AE Amsterdam,  
 The Netherlands Telephone: +31 (20) 485 3757 Fax: +31 (20) 485 3432  
 Email: nlinfo-f@elsevier.nl Web: www.elsevier.nl/locate/ldairyj  
 ISSN: 0958-6946  
 DT Journal  
 LA English

L3 ANSWER 31 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 568080 FROSTI  
 TI Formulation of an oat-based fermented product and its comparison with  
 yoghurt.  
 AU Martensson O.; Andersson C.; Andersson K.; Oste R.; Holst O.  
 SO Journal of the Science of Food and Agriculture, 2001, (November), 81  
 (14), 1314-1321 (30 ref.)  
 Published by: John Wiley & Sons Ltd Address: Baffins Lane, Chichester,  
 West Sussex PO19 1UD, UK Telephone: +44 (1243) 779777 Fax: +44 (1243)  
 775878 Email: cs-journals@wiley.co.uk Web: www.wiley.co.uk/sci or  
 www.interscience.wiley.com  
 ISSN: 0022-5142  
 DT Journal  
 LA English  
 SL English

L3 ANSWER 32 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 563541 FROSTI  
 TI Characteristics of a cheese-like food produced by fermentation of the  
 mushroom Schizophyllum commune.  
 AU Okamura-Matsui T.; Takemura K.; Sera M.; Takeno T.; Noda H.; Fukuda S.;

Ohslugi M.  
SO Journal of Bioscience and Bioengineering, 2001, (July), 92 (1), 30-32 (10 ref.)  
Published by: The Society for Bioscience and Biotechnology Address: c/o Faculty of Engineering, Osaka University, 2-1 Yamadaoka, Suita, Osaka 565-0871, Japan Telephone: +81 (6) 6876 2731 Fax: +81 (6) 6879 2034 Email: sfbj@bio.eng.osaka-u.ac.jp  
ISSN: 1389-1723  
DT Journal  
LA English  
SL English

L3 ANSWER 33 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 562051 FROSTI  
TI Oats and fat-free milk based functional food product.  
AU Bekers M.; Maraуска M.; Laukevics J.; Grube M.; Vigants A.; Karklina D.; Skudra L.; Viesturs U.  
SO Food Biotechnology, 2001, (March), 15 (1), 1-12 (34 ref.)  
Published by: Marcel Dekker Inc Address: PO Box 5005, 185 Cimarron Road, Monticello, NY 12701-5185, USA Fax: +1 (914) 796 1772 Web: www.dekker.com/e/p/fbt  
ISSN: 0890-5436  
DT Journal  
LA English  
SL English

L3 ANSWER 34 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 534271 FROSTI  
TI Purification and characterization of an extracellular alpha-amylase produced by Lactobacillus manihotivorans LMG 18010T, an amylolytic lactic acid bacterium.  
AU Aguilar G.; Morlon-Guyot J.; Trejo-Aguilar B.; Guyot J.P.  
SO Enzyme and Microbial Technology, 2000, (September), 27 (6), 406-413 (26 ref.)  
ISSN: 0141-0229  
DT Journal  
LA English  
SL English

L3 ANSWER 35 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 526897 FROSTI  
TI Novel lactic acid bacteria.  
IN Oh J.S.  
SO European Patent Application  
PI EP 1002052 A1  
WO 9907826 19990218  
AI 19980702  
PRAI Korea, Republic of 19970807; 19980107; 19980528  
DT Patent  
LA English  
SL English

L3 ANSWER 36 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 491122 FROSTI  
TI Novel lactic acid bacteria.  
IN Oh J.S.  
SO PCT Patent Application  
PI WO 9907826 A1  
AI 19980702  
PRAI Korea, Republic of 19970807; 19980107; 19980528  
DT Patent  
LA English  
SL English

L3 ANSWER 37 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN



AN 476102 FROSTI  
TI Prebiotics and probiotics.  
IN Conway P.L.; Crittenden R.; Henriksson A.; Lucas R.J.; Wang X.  
PA University of New South Wales; Commonwealth Scientific and Industrial  
Research Organisation; Arnott's Biscuits Ltd; Burns Philp and Co. Ltd;  
Burns Philp Research and Development Pty Ltd; Goodman Fielder Ingredients  
Ltd; Gist-Brocades Australia Pty Ltd  
SO PCT Patent Application  
PI WO 9826787 A1  
AI 19971218  
PRAI Australia 19961219  
DT Patent  
LA English  
SL English

L3 ANSWER 38 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 463027 FROSTI  
TI Beer. (c.)  
AU European Brewery Convention  
SO Analytica - EBC., Published by: Verlag Hans Carl Getranke-Fachverlag,  
Nurnberg, 1998, 53 pp (0 ref.)  
European Brewery Convention.  
ISBN: 3-418-00759-7  
NTE REFERENCE ONLY  
DT Book Article  
LA English

L3 ANSWER 39 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 445532 FROSTI  
TI Profibre - 'Dietary Fibres: structural and physical properties of  
non-starch polysaccharides and resistant starch and consequences of  
processing on human physiology'.  
AU Tschappat S.  
SO Lebensmittel Technologie, 1997, (July), 30 (7-8), 279-280 (0 ref.)  
NTE Report of a workshop held on 20-22 March 1997 in Milan, Italy.  
DT Journal  
LA German

L3 ANSWER 40 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 439719 FROSTI  
TI Alternan and highly branched limit dextrans: low viscosity  
polysaccharides as potential new food ingredients.  
AU Cote G.L.; Leathers T.D.; Ahlgren J.A.; Wyckoff H.A.; Hayman T.; Biely P.  
SO Chemistry of novel foods: proceedings of a symposium, Honolulu, December  
1995., Published by: Allured Publishing Corporation, Carol Stream, 1997,  
95-110 (70 ref.)  
Spanier A.M.  
ISBN: 0-931710-57-X  
DT Book Article  
LA English

L3 ANSWER 41 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 422949 FROSTI  
TI Influences of lactic acid bacteria on technological,  
nutritional, and sensory properties of barley sour dough bread.  
AU Marklinder I.; Haglund A.; Johansson L.  
SO Food Quality and Preference, 1996, 7 (3-4), 285-292 (30 ref.)  
DT Journal  
LA English  
SL English

L3 ANSWER 42 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
AN 420170 FROSTI  
TI Influence of lactic acid starter cultures on the  
quality of malt and beer.

AU Haikara A.; Laitila A.  
 SO Proceedings of the 25th congress, Brussels, 1995., Published by: IRL  
 Press Ltd., Oxford, 1995; 249-256 (18 ref.)  
 European Brewery Convention  
 ISBN: 0-19-963614-1  
 DT Conference Article  
 LA English  
 SL English; French; German

L3 ANSWER 43 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 420169 FROSTI  
 TI Respiratory organic acids during malting - new quality parameters for  
 malt.  
 AU South J.B.; Corkey K.  
 SO Proceedings of the 25th congress, Brussels, 1995., Published by: IRL  
 Press Ltd., Oxford, 1995; 233-240 (5 ref.)  
 European Brewery Convention  
 ISBN: 0-19-963614-1  
 DT Conference Article  
 LA English  
 SL English; French; German

L3 ANSWER 44 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 419993 FROSTI  
 TI Technical meeting of the EBC brewing science group.  
 AU Anon.  
 SO Cerevisia, 1996, 21 (3), 7-17 (0 ref.)  
 NTE Report on the technical meeting of the EBC brewing science group held on  
 2-5 June 1996 in Berlin, Germany.  
 DT Journal  
 LA English

L3 ANSWER 45 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 409294 FROSTI  
 TI Genetics of lactobacilli, leuconostocs, and pediococci: screening,  
 selection and construction of mutants.  
 AU Kammerer B.  
 SO Lait, 1996, 76 (1), 51-66 (46 ref.)  
 DT Journal  
 LA French  
 SL English; French

L3 ANSWER 46 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 365658 FROSTI  
 TI Fermented oatmeal soup - influence of additives on the properties of a  
 nutrient solution for enteral feeding.  
 AU Marklinder I.; Lonher C.  
 SO Food Microbiology, 1994, 11 (6), 505-513 (25 ref.)  
 DT Journal  
 LA English  
 SL English

L3 ANSWER 47 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 327978 FROSTI  
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 AU Wainwright T.  
 SO Brewers' Guardian, 1993, 122 (9), 15+18 (0 ref.)  
 DT Journal  
 LA English

L3 ANSWER 48 OF 48 FROSTI COPYRIGHT 2007 LFRA on STN  
 AN 243090 FROSTI  
 TI Structure of an exocellular beta-D-glucan from *Pediococcus* sp.,  
 a wine lactic bacteria.  
 AU Llauberes R-M.; Richard B.; Lonvaud A.; Dubourdieu D.

SO Carbohydrate Research, 1990, 203 (1), 103-7 (15 ref.)  
DT Journal  
LA English  
SL English

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE  
ENTRY

TOTAL  
SESSION

FULL ESTIMATED COST

105.28

208.99

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE  
ENTRY

TOTAL  
SESSION

CA SUBSCRIBER PRICE

0.00

-24.96

FILE 'STNGUIDE' ENTERED AT 16:38:22 ON 02 AUG 2007  
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Jul 30, 2007 (20070730/UP).

=> d his

(FILE 'HOME' ENTERED AT 16:27:27 ON 02 AUG 2007)

FILE 'CAPLUS' ENTERED AT 16:27:35 ON 02 AUG 2007

L1 243 GLUCAN AND "LACTIC ACID"  
L2 32 GLUCAN AND ENTEROCOCCUS

FILE 'STNGUIDE' ENTERED AT 16:30:27 ON 02 AUG 2007

FILE 'FROSTI' ENTERED AT 16:35:56 ON 02 AUG 2007

L3 48 S GLUCAN AND "LACTIC ACID"  
L4 4 S GLUCAN AND ENTEROCOCCUS

FILE 'STNGUIDE' ENTERED AT 16:38:22 ON 02 AUG 2007

=>

---Logging off of STN---

=>

Executing the logoff script

=> LOG Y

COST IN U.S. DOLLARS

SINCE FILE  
ENTRY

TOTAL  
SESSION

FULL ESTIMATED COST

0.18

209.17

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE  
ENTRY

TOTAL  
SESSION

CA SUBSCRIBER PRICE

0.00

-24.96

STN INTERNATIONAL LOGOFF AT 16:40:26 ON 02 AUG 2007